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"The Original 16/32bit Online Magazine"

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- The Editor's Desk - THE FLIP SIDE - LATTICE V.5  
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\* D. HAYES PART II - THE CHARGES! \*  
\* WINDOWS FOR REAL? \*  
\* NEWDESK, COMING SOON? \*

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> The Editor's Podium ¢

This is the first issue of the New Year and to each and every one of you let's work together in giving each other and Atari the support needed to continue bringing the best hardware for the dollar to the consumer in the computing market. After all, its no secret that Atari's computers have been and will continue to be the very best value for the dollar. This issue amplifies both the varied opinions concerning the 'new' products on the other platforms and the massive ad campaigns being staged by IBM and Apple. Are they really new? Does advertising pay? Are a few of the questions covered in this issue.

On another subject, there has been a few "cute comments" that STReport should "change its name" because we have been offering coverage of Windows 3.0 and offering an in-depth easily understood explanation of multi-tasking. (yes folks, more of the "Kill the Messenger" garbage) Considering the sources its quite easy to dismiss the negative comments. But in all fairness it should be mentioned that since the ST does emulate both the MAC and IBM rather well and since WINDOWS 3.0 runs fine on the ST when using Supercharger by Talon, STReport has done nothing more than support those who are using the emulation benefits of the ST. Actually folks, that's the nice way of saying "hey guys, there's something for everyone in STReport". As far as the name change goes, STReport is our name and that's that. In the future, it will still be STReport regardless of the platform or computer(s) we cover. 'Tis a fond remembrance of our humble beginnings. There is no name change in STReport's future.

This issue marks the beginning of 1991 and a renewed push by STReport to help ensure that as many folks as possible find the Atari Computer product line and invest in its future. Hopefully, we can count on your help to accomplish this task.

Thank you for your strong support,

Ralph.....

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> The Flip Side STR Featureâ ¢ "..."a different viewpoint"  
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A LITTLE OF THIS, A LITTLE OF THAT  
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by Michael Lee

Happy New Year!! When I started this column, I never dreamed that I'd still be at it for this length of time. The column has changed considerably since it started and is still under metamorphosis. There's a couple of things that I feel I should go over again.

All of the posts are from the three major on-line services, CompuServe, Genie and Delphi. There's a lot of good information on all three services but since I'm on Genie the most, that's where the majority of the posts come from.

I attempt to keep the posts as close to original as possible but I do try clean up the worst spelling and grammar errors (not that I make any claim to be a grammarian), just to keep them easy to read. On occasion I will delete some extraneous chit-chat that doesn't have anything to do with the topic being discussed, i.e., "Do you drink Pepsi", "I was watching Star Trek the other night...", etc. just to keep the column as short as possible.

Finally, I do my best to make sure that everyone gets proper credit but on occassion, I might misspell a name, not know a person's "real" name (just his on-line handle), etc. I apologize in advance if this happens to one of your posts. It will be my fault, not Ralph's (he has kept his word and not edited my column whether he agrees with with it or not).

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From a series of posts by Norm Wierness on Delphi:

I like the TEACs because they are small (1 inch high), quiet as can be and only require 300 milliamps at 5 volts, no 12 volts required. And they go for \$55 at the swapmeets, even for 1.44 Meggers. I hook them up to ST's all the time. Nothin' to it!

...To connect TEAC floppies, connect all 34 wires straight through. There is a set of jumper pins on the drive. It comes from the factory with a jumper the set marked "D0" which means it decodes itself as Drive A.

Just move the jumper plug to the set marked "D1" to get it to respond as Drive B.

...(Ed Note: If you wish to make both drives external or to place the system into another case..) you just replace the ribbon cable from the ST motherboard with a longer 34-wire cable. Put two 34-pin connectors on it and daisy chain the cable to the two floppy drives. Use the jumper plugs on the drive (one at "D0" and the other at "D1") to determine which is Drive A and Drive B.

...To mount 34-pin ribbon connectors, put them on the cable and hold them in position with finger pressure. Then slip them into a small vise and tighten until snug while your fingers keep it in position. Then you can tighten the vise until the pieces are completely together.

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Question from Ralph Turner on Genie...

I have a question concerning the permissible length of a SCSI cable. The ICD host adapter manual says the cable can be up to 18 feet long, so I thought I'd try it that long. However, I can't get the computer to talk to the drive mechanism...Have any of you ever made a real long SCSI cable successfully? Do they need to be shielded?

Answer by Doug Williams on Genie:

Ralph, the ANSI SCSI specifications say that an open-ended cable (that's what the ST uses) may be a 50-wire flat cable or 25-wire twisted pair cable and a maximum length of 6 meters (18+ feet). Due to variations in cable impedance, "implementations may require trade-offs in shielding effectiveness, cable length, the number of loads, transfer rates, and cost to achieve satisfactory system operation." Basically, SCSI is designed to handle 6 meters cables, but is not guaranteed.

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From JR Wenzel on Genie:

Some of the reasons that cartridges aren't very widely used are:

- o Cartridges are expensive to manufacture - ROMs, printed circuit boards, and cartridge shells have to be produced and then assembled. The costs involved add up very quickly and with disks costing what they do most programs wind up being released on disk in order to keep costs (and prices) down.

- o The cartridge port on the STs is limited to 128k - Large programs are difficult to implement within this limit. While it is possible to accommodate more than 128k of data on an ST cartridge, additional hardware is needed in order to implement it; again increasing the costs of manufacture.

- o Cartridges often tend to be bulky - This makes them less attractive than disks from a physical storage point of view.

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From J.Craswell of Dover Research on Genie...  
Starting Jan 1 1990 the offices of Dover Research will reopen to provide users of the Atari market with new exciting graphics hardware products

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We will also be supporting/selling/mfging the Colour ISAC card from Image Systems. They will of course continue to sell and support the M24LMax and C21LMax monitor products. Basically the same folks who did the Atari work are now "The Pro's from Dover". So expect the same service as before. Or better since you will now have much more of their time!! Hope to hear from you in 91! Call or write us at the following address. DOVER RESEARCH  
321 West 4th Street Jordan, MN 55352 (612) 492-3913

P.S. look for some NEW products for the TT & MEGA/STE in 1991!!!!

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From Jim Ness on Genie:  
Prism Paint is one of the products which will soon be released by Lexicor. Lexicor's main thrust will be animation and CAD graphics, and as part of that, they need a paint program to create the frames. Prism is being written by Robert Birmingham, who previously had ART-ST, a shareware paint program.

David Ramsden is also involved with Lexicor, mostly in their animation stuff. You might remember David from STart Magazine. I forget the other people involved, but in general, they were involved in Antic Software's Cyber series.

Regarding Prism, I asked Robert B. last Thursday about which art formats it can load. IFF, NEO, PI?, and PC? were all included. In order to add super high rez capabilities (ala TT), he expanded the basic Degas file format, and created the .PNT format. There are already some Prism .PNT examples floating around.

-----  
Question from Leland Dumas on Genie:  
What is the advantage of owning a mega Ste over owning a 1040 STe with 4 megs of SIMMs? It appears that there will be a serious price difference so I would like to know why.

Answer from JR Wenzel:  
Basically there are 4 advantages that I see:

- A built in LAN port
- VME bus expansion port
- An excellent detached keyboard
- Built in software switchable accelerator
- Built in hard drive

Of course this all depends on what you specifically want to do with the system. The added features lend themselves more toward business and networked applications.

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From Todd at Soft-Aware (Informer II) on Genie:  
...we have indeed been very busy working on the latest version of the program. We have been putting in many Loooooong hours of late and are

doing everything we can to make the program as bug free as possible before it goes out the door.

Yes indeed we are alive and well. You may have not heard much about Soft-Aware or INFOMER II lately but all that is about to change! You will soon be reading about INFORMER II in the pages of ST Informer Mag. (how appropriate) and seeing our ads there as well. Unlike other databases for the ST, INFORMER II is continuing to be supported and upgraded. There are many new features in version 2.03 and much work has gone into making it as useful and usable to all Atari Users as possible. Including that INFOMER II is now resolution independent, with the exception of the graphic images, this means the database you created on a color ST will also work just the same on an STe or a TT!

So stay tuned, INFORMER II will be shipping any day now. When it does there will be an official announcement here along with a description of the new features that have been added.

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Until next week....

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#### :HOW TO GET YOUR OWN GENIE ACCOUNT:

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To sign up for GENie service: Call: (with modem) 800-638-8369.

Upon connection type HHH (RETURN after that).  
Wait for the U#= prompt.

Type: XTX99587,CPUREPT then, hit RETURN.

\*\*\*\* SIGN UP FEE WAIVED \*\*\*\*

The system will now prompt you for your information.

-> NOW! GENIE STAR SERVICE IS IN EFFECT!! <-

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> "C" COMPIERS STR Featureâ ¢           "..one compiler 'better' than another?"  
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# WHAT.. MAKES A GOOD COMPILER? =====

by Richard Covert

What makes one compiler 'better' than another? Some things are subjective and can only be decided by the programmer. Others are tools which all programmers will use. In the final analysis, it is productivity. A good compiler is complete enough and bug free enough to allow you to write error free code. A bad compiler is one with undocumented bugs, or a sparse library. A good compiler contains enough tools, such as a GEM Resource Construction Set, a Debugger, and a Library Manager as well as the compiler and assembler, to develop bug free code.

Programmer productivity is based upon his past experiences as well as his current tools. For example, since I have programmed in C under UNIX since 1982 and am most familiar with the UNIX 'vi' and 'emacs' editors, when I looked at C compilers for my Mega ST three years ago I chose the Mark Williams C compiler over the Megamax because it was closer to my UNIX development environment. Other programmers might have chosen Megamax because of its integrated screen editor/compiler environment. Such choices are best left to the individual programmer. On the other hand, a source code debugger is a tool that all programmers could use and such an omission would mean that a compiler is less useful than otherwise.

As a fulltime UNIX X Windows programmer I am now appreciate the integrated Editor/Compiler environment provided by such compiler packages as the Megamax/Laser, the Lattice/HiSoft, and the German TurboC packages. This environment allows the programmer to view several (generally up to the TOS limit of four) files simultaneously. Under UNIX with X Windows each window is a separate process and can run its own copy of the compiler as well as any other UNIX tool. But under TOS, with its single tasking nature, the Editor must control the multiple editing windows. Thus, while you can edit and compile simultaneously under UNIX XWindows, under the ST Editors you can simply edit and then compile. The older Mark Williams approach, being heavily based upon the UNIX EMACS editor, restricts the ST programmer to a single window. EMACS is quite useful on a UNIX machine with X WINDOWS (and thus you can run multiple copies of EMACS) the single tasking nature of TOS restricts EMACS to a single copy. A good multiple window editor is a good approximation of the X Window environment.

So, what makes a good compiler? Well, a good editor/compiler with multiple windows is a must. Second, the compiler should be fast. Third, the compiler must be customized for the ST environment. Fourth, the compiler must be supported by the developers with complete documentation.

I suggest that the HiSoft Lattice C Version 5 compiler is a good compiler because of it meets the criteria above. LC5 has a nice editor/compiler environment with up to four editing windows open. You can compile from within the editor. LC5 is fast as witness several

benchmarks. LC5 is customized for the ST environment, and LC5 is vigorously supported by the HiSoft Team in England.

In fact, LC5's greatest strengths are its ST specific libraries. And one of the greatest weaknesses of the German TurboC is simply that that is hasn't been ported to English yet!! The single most valuable resource of a compiler is its manuals, and a German manual to an English programmer is worse then useless!

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> Lattice C V.5 STR Reviewâ ¢ "....a modern compiler.."  
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A R E V I E W O F T H E H I S O F T L C 5  
=====

by R. Covert

The Lattice C Version 5 (LC5) compiler is a modern compiler with one of the most complete libraries available for the Atari ST/TT platforms. LC5 is a complete ST development package including the C compiler, a full screen GEM editor, an assembler, a resource construction set, a global optimiser and various library manipulation programs. LC5 complies with the ANSI Standard X3.159 with the single omission of trigraphs. This review is of the Version 5.06.02 compiler which I recently purchased at the W.A.A.C.E show in October and have since used for porting several programs from the UNIX environment. LC5 is developed and supported by HiSoft of England. JOPPA COMPUTERS also carries the LC5 package. I would recommend registering your copy immediately and inquiring from HiSoft about the latest version. I have found HiSoft to provide excellent updates and are regularly updating the package. Thus, your copy from JOPPA COMPUTERS may have been updated since Joppa received it!

#### Review System

I am reviewing the HiSoft Lattice C compiler on a Mega ST with 4 megabytes of RAM, TOS 1.4, the FAST TECHNOLOGY Turbo-16 accelerator, and a monochrome SM124 monitor. I also use the Atari color monitor but prefer the monochrome for everyday editing. I generally use the color monitor to construct color resource files and to verify the operation of my programs in low and medium resolutions. I am using a 130 megabyte hard drive system from ABCO Computers Inc. LC5 requires approximately seven meagbytes on my system. I use NeoDesk 3.0 (from Gribnif Software) as the GEM Desktop, and Micro C Shell version 2.7 (from Beckemeyer



Software) as my CLI. I also use the Beckemeyer C Tools and the Beckemeyer MAKE program as part of my development environment.

## The LC5 Market

Who is the LC5 compiler targeted towards? Well, the sheer size of the compiler tends to encourage the use of a hard disk drive, but HiSoft has adapted the LC5 Installation for use with dual double sided double density floppy based Ataris. LC5 will compile in a 1/2 megabyte system but once again you lose features. So, you should have at least one megabyte of RAM and two ds/dd floppies, while the LC5 compiler really demands a hard disk drive. The total LC5 package uses over seven (7) megabytes of hard disk space when fully installed with all of its tools! Atari 520ST users can not compile from within the LC5 editor for example. At a USA mail order price of almost \$200 (though Joppa Computers was selling it for \$150) LC5 is one of the more expensive compilers available for the ST.

## The LC5 Package

The LC5 Package consists of the LC5 Manuals, an Installation Guide, and the LC5 floppies as well as the registration card and various advertisements from HiSoft.

## The Manuals

The LC5 package consists of three spiral bound manuals totalling XXXX pages. The first manual is a compiler operation manual which describes the LC5 Tools ( the full screen editor, the WERCS resource editor, the MONSTC debugger, and the compiler ). The second manual documents the Standard UNIX Library as implemented in the LC5 package. The third manual documents Atari ST specific functions such as the AES and VDI functions. The manuals document the various ST specific header files as well as all of the functions in the LC5 libraries. Some functions have code fragments documenting their use. The Manual a separate index in each Volume. I have found the index to be helpful in locating various Library functions and compiler options.

### VOLUME I USER MANUAL

I received the Version 5 First Edition March 1990 Volume I manual with my compiler. Volume I includes a Table Of Contents consisting of an Introduction, EdC, LC, CLink, Batchter, WERCS, MonST2C, ASM, GO, The Lattice C 5 Tools. There are fourteen Appendices covering compiler errors, compiler implementation, the assembler, GEM resource files, the libraries, and other compiler functions.

CHAPTER ONE is the introduction to the Lattice C. There are three Lessons in using the LC compiler illustrated with screen shots. Chapter One contains a Hints and Tips to help you get the most out of the LC5 package.

CHAPTER TWO describes the usage of the EdC Screen Editor. EdC is a proprietary editor for the LC5 package which is fully GEM based. EdC supports up to four open GEM windows. EdC allows the four windows to be tiled in four different ways. My favorite is to have them tiled vertically so that the title bar of each window is visible. EdC has complete Search and Replace, GoTo, and Find functions. EdC has autoindenting of lines as well as braces matching. EdC can compile the

source code. All of compiler option switches are available through a Menu Bar from within EdC.

CHAPTER THREE describes the LC5 compiler operation. One unique feature of the LC5 compiler is the use of pre-compiled header files. Header files are ASCII text files which contain constants and external variable declarations. Header files are generally included in your C source code files by use of the "#include" preprocessor operator. LC5 allows you to precompile these header files so that they are smaller than the normal ASCII files and take less time to compile. All of the LC5 precompiled header files are contained as normal uncompiled ASCII files in a separate folder named "headers". The LC5 Floppies

CHAPTER FOUR describes the LC5 linker "CLINK". Link may be evoked from "EDC" or directly from the GEM Desktop or from "Batcher" program.

CHAPTER FIVE describes the HiSoft "Batcher" command line interpreter program. A CLI program replaces the standard GEM desktop and uses either MSDOS style or UNIX style commands. Batcher is modelled after the IBM MSDOS CLI and uses DIR to list the directory, COPY to copy files and other DOS style commands. All of the LC5 compiler stages may be run from Batcher.

CHAPTER SIX is the WERCS Resource Editor. A resource editor is a program which constructs GEM objects. A dialog box is a typical GEM object. Other objects are text boxes, buttons, and radio keys. WERCS will construct GEM RSC files for C as well as other ST languages. WERCS has several unique features. WERCS has an Image/Icon Editor for constructing bit mapped graphics. Wimage is used to convert Neochrome or DEGAS Elite files into WERCS RSC Images. WERCS also has a TEST mode which allows you to test the operation of your dialog boxes and buttons.

CHAPTER SEVEN covers the MonST2C binary debugger. MonST2C is a low level debugger which requires familiarity of the Motorola 68000 assembly language. MonST2C displays several one of which is the C source code file, another is of the binary listing. You are single stepped through the C source file, but if you wish to set breakpoint, change C variable values, etc. you must modify them through their binary addresses. This requires a knowledge of the Motorola 68000 assembly language.

CHAPTER EIGHT is for the LC5 Assembler. ASM is a full macro assembly language assembler. HiSoft recommends purchasing their DevpacST2 if you plan to develop assembly language source code. Chapter Eight describes the operation of ASM but does not describe the implementation of the ASM assembler. thus, it assumes that you already know how to program in assembly language, or that you have their DeVpacST2 package.

Chapter Nine covers the Global Optimiser GO which is optional run after LC1 and before the Clink linker/loader. GO can optimise your code for either smaller code or for faster execution.

CHAPTER TEN covers the other LC5 Tools such as their 'hramdisk' reset-proof ram disk. Lcompact is a tool which precompiles a standard ASCII UNIX header file that is processed more quickly by the LC5 preprocessor. Recompile is one way, thus you should save your original ASCII header files for later modification. Other Chapter Ten

tools are for various object files. Wconvert convert older Digital Research or Kuma Resource Construction Set resource files into WERCS RSC files. Wimage converts Neochrome and DEGAS Elite graphics into WERCS images.

LC5 comes on seven (7) double sided double density 80 track 9 sector 3.5" TOS floppies. As such, it is the largest C compiler package available for the ST. As a comparison, the latest Prospero C compiler is on three SINGLE sided double density floppies, while the Mark Williams Version 3 comes on YY double sided double density floppies. Rumor has it the the German Turbo C compiler is on five double sided double density floppies, although I can't verify this. The importance of the number of floppies is that the compiler has more tools and larger libraries with more floppies. HiSoft has an additional nice touch in that the floppies are stored in a HiSoft Disk Jacket which has a hard cover.

Volume II covers the standard UNIX style libraries. functions such as fopen, fclose, printf, and scanf are documented in this manual.

Volume III covers the Atari ST specific AES/VDI libraries. Functions such as form\_do, obj\_draw, wind\_set are documented in this manual.

### The LC5 Compiler

The LC5 compiler is a two stage compiler with an optional final global optimizer. LC.PRG is the version of the LC5 compiler which incorporates a full screen editor. You can develop your code from within LC5.PRG and then compile it while running the editor. The LC5 editor allows up to four windows to be open simultaneously.

### THE LC5 TOOLS

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#### WERCS

WERCS is the HiSoft resource construction set editor. I originally purchased WERCS from Michtron over two years ago and have found it to be one of the best RCS tools available. WERCS is used to build RSC files for use in C and other languages. The WERCS manual is incorporated in the LC5 Volume I manual. WERCS has several nice features including the ability to include DEGAS and NEOCHROME pictures as icons within your RSC file. Another nice feature is the TEST mode where you can test your RSC file from within WERCS and see the return values of various objects. WERCS is a GEM program.

#### MONSTC

MONSTC is the Hisoft binary level debugger for the LC5 package. MONSTC is based upon the original MONST assembly language debugger. MONSTC has been modified to display the C source code in one window but you manipulate the variables at object code level. You should be familiar with the Motorola 68000 instruction set to fully utilise this debugger. Given that it is a binary (and not source) code debugger it is a very complete tool.

#### GENST

GENST is the assembler supplied with the HiSoft DevpacST2 assembler. GENST generates binary files in GST-format which can be linked with the LinkST linker included with the LC5 compiler. LinkST will link only GST-format files, thus you would need to compile your C source so that GST-format binary files are built.

## BATCHER

BATCHER is a very limited MSDOS style shell which allows you to run the LC5 compiler and editor interactively. Unfortunately MSDOS is the MAJOR reason why I don't own an IBM PC and thus I haven't used BATCHER. It may be of interest to Atari 520ST users as it allows you to use the LC5 package with only 1/2 meg of RAM by running each phase of the compiler from the shell.

## INSTALLATION

LC5 comes with a batch process installation program on Disk 2. You are prompted for the level of installation desired allowing LC5 to be installed on machines from the Atari 520ST to a full blown Mega ST4 with hard drives. I have installed LC5 on my Mega ST4 with TOS1.4 and the FAST TECHNOLOGY TURBO- 16 board as well as a 130 megabyte hard drive (from ABCO COMPUTERS) system. Installation takes about 20 minutes for a full blown seven megabyte system!! In fact, several of the LC5 Libraries are stored in compressed format so as to reduce the number of floppies. Without the compression, the LC5 package might easily consist of 10 floppies!! Installation consists of answering several system configuration questions such as do you wish to install a complete or just a partial system, and then where the LC5 package is to be installed. After you answer the initial prompts you simply insert the correct floppy as prompted on the Atari ST monitor. The Installation program runs in medium and high resolutions.

## ANSI Compatibility

As mentioned previously the only feature missing from LC5 is trigraphs. A trigraph is a three character sequence used to represent several ASCII characters not found in other languages. The following is from the ANSI Standard:

### 2.2.1.1 Trigraph Sequences

All occurrences in a source code file of the following sequences of three characters (called trigraph sequences) are replaced with the corresponding single character:

??=	#
??(	[
??/	\
??)	]
??'	^
??<	{
??>	}
??-	~

No other trigraph sequences exist. Each ? that does not begin one of the trigraphs listed above is not changed.

The following information is from the ANSI RATIONALE and describes why trigraphs were introduced.

#### 2.2.1.1 Trigraph sequences

Trigraph sequences have been introduced as alternate spellings of some characters to allow the implementation of C in character sets which do not provide a sufficient number of non-alphabetic graphics.

Implementations are required to support these alternate spellings, even if the character set in use is ASCII, in order to allow transportation of code from system which must use trigraphs.

The ANSI RATIONALE goes on in detail explaining why trigraphs were introduced, but stated basically some computer terminals lack the TILDE characters and thus another method of representing the TILDE character is required for those machines. The Atari ST has all of the required keys and thus does not require the trigraphs. But, HiSoft should implement trigraphs as soon as possible simply because the ANSI Standard requires it!!

#### HITS

LC5 has the BEST and most complete library available for the ST (even better than the Turbo C compiler from Germany!). I will document in future columns which are the best and most novel library functions and how to use them. Briefly though there are several. First, LC5 has the ability to generate code to run on ANY Motorola 68000 processor from the 68000 (used in the ST line of computers) through to the 68030 (used in the TT computers). Also, LC5 has implemented code for all of the TOS 1.4 and beyond functions. One nice touch is the extended file selector function introduced in TOS 1.4. The extended file selector displays a message above the File Selector Dialog Box (i.e. Save FileName ). LC5's version will detect the TOS version at runtime, and will automatically display an additional dialog box above the File Selector Dialog Box when run on pre-TOS1.4 machines. Thus, the developer has access to the latest file selector, and LC5 generates code which runs the same on pre-TOS1.4 machines. All this without additional work from the LC5 user!!

Another great feature of the LC5 package is the ability to compile programs which can detect if they are run as a DA, as a GEM program or even as an AUTO folder program. I do not know of any other ST compiler with this feature!! So, now you can write your programs as GEM programs and then just rename them to ".ACC" and they can be run as a DA. LC5 maintains an external variable which contains the state of the program (DA, GEM, or AUTO folder program) and can be used by your code. LC5 even includes a small sample program showing how to use this feature. LC5 declares an external variable which is set to indicate the type of program at runtime. A valuable tool for ST programmers!!

#### MISSES

Lattice C Version 5 has several glaring omissions which almost overwhelm its otherwise fantastic features. First, LC5 does not have an integrated MAKE utility. Second, LC5 does not have a source code debugger. Third, LC5 does not have a UNIX style shell. Fourth, LC5 has

a serious bug in the editor/compiler which renders it useless for GEM programming. I will describe each miss next.

MAKE is a UNIX derived program. Make uses the timestamp of files to determine which files need to be recompiled to regenerate the final executable program. MAKE uses a file called the 'Makefile' to describe the relationship between the source code files and the executable files. A 'Makefile' must be constructed for each project, but there are several public domain UNIX derived Makefile generators which can help automate the construction of a project specific Makefile. Once a Makefile is finished you simply say 'make' and the MAKE program will recompile and/or link only those files which have changed since the last make. This simplifies the development process and allows you to develop smaller source code files. Additionally, MAKE can be used to generate other targets besides programs. I routinely use MAKE on UNIX to format and printout documents which might need to be processed by 'troff' and 'tbl' before printing. So, MAKE can be used to manage any project based on the timestamp of files. Not having MAKE with LC5 makes developing large projects harder and more time consuming. LC5 has a limited Linking feature which allows you to use a Link Control File, but as this only tells the compiler which files need to be linked to form the executable, it is less useful than MAKE. The Link Control File mechanism also does not recompile the source, it only links the binaries together to form the executable.

Lattice C Version 5 does not have a source code level debugger. LC5 instead offers the MONSTC debugger which is heavily based upon the HiSoft MONST assembly language debugger. MONSTC has been modified to display a window with the C source code but you can not modify C variables. You step through the assembly language window instead. The value of a real source code debugger is once again demonstrated with the UNIX X WINDOWS 'cdb' source code debugger. In it you can examine and change any C variable, single step through your C statements, set breakpoints (C statements to stop program execution) and set levels of debugging traces. All of these features reduce the amount of debugging time. Without such a debugger the programmer is reduced to using the primitive mechanism of inserting debugging statements (i.e. `printf(stderr, "This is an error.\n");` ) in the actual source code. Obviously this is error prone and time consuming. LC5 needs a full C source code debugger as soon as possible!

Lattice C does not offer a UNIX shell as an alternative to compiling from the GEM desktop. LC5 does offer a MSDOS shell called BATCHER but as I intensely dislike MSDOS (that being the biggest reason why I still own my Atari ST) I refuse to use it. A UNIX shell would allow you full use of a MAKE program, but since LC5 doesn't have a MAKE program, the lack of a UNIX shell is less important. Also, since the TOS is a single tasking operating system, a UNIX shell is less useful in any case. The biggest power of a UNIX shell lies in its ability to 'pipe' output from one program into the input of a subsequent program. Thus you could pipe a directory listing into a printing program under UNIX. Since TOS is single tasking such an operation usually involves creating temporary files and thus is slower. Still, a UNIX shell would be a nice feature.

Finally, the worst problem with Lattice C Version 5 is an actual bug in the LC5 Editor/Compiler. LC5 has a version of the the first phase of the compiler which loads the LC5 Editor. You can then compile from within the Editor. A normal development environment on a hard disk consists of many different directories (folders to STers). One such

folder contains the LC5 binary executable files (which I call H:\LC\BIN). Other folders contain the LC5 Library and Header Files. And finally, the source code for a project is in its own folder (for ease of development and for backup). I use many different folders for my source code. The bug rears its ugly head because the Editor does not maintain the paths properly. One feature of the Editor is that you can compile and RUN your program from within the Editor. This is really handy when your program has many different source code files as you can have up to four files open simultaneously. The bug is that when you execute your program from within the Editor, the Editor uses its PATH as the current working directory of your program. Thus, if you write a GEM program which loads a RSC file in the same folder as the program's executable, it will fail when run from within the Editor but will run properly from the GEM desktop!! This is because the Editor uses its PATH to open the RSC file. The following documents the bug:

H:\LC\BIN\LC.PRG

-

the folder/executable for the Editor/compiler

G:\SRC\SAMPLE\sample.c - a sample C GEM program

G:\SRC\SAMPLE\sample.rsc - a sample C GEM Resource File

```
/* sample.c */
#include <aes.h>
.
.
. other program code
.
.

main()
{
    rsrc_load("sample.rsc" ); /* load the RSC file into memory */
}
/* end of sample.c */
```

This program will fail to locate the "sample.rsc" file if run from within the LC5 Editor but operates correctly from the Desktop. If you copy the RSC file to the same folder as the Editor the program will run properly from within the Editor as well. This has caused some LC5 users to develop ALL of their projects from within the Editor's folder!! This is undesirable because you can't separate your various projects and you may delete files which you shouldn't. This is a serious bug which HiSoft is aware of but hasn't fixed yet. This bug occurs whenever you try to open any file from within your program.

## CONCLUSIONS

I recommend the Lattice C Version 5 compiler in spite of its lack of a source code bugger and in spite of the editor bug simply because it is an ANSI C compiler and because of the strength of its libraries. Also, I have found Alex Kieran of HiSoft to be a valuable resource. I have written two letters to Hisoft documenting my findings and have received prompt replies from Alex Kieran personally. I find that HiSoft has excellent support and I have great hopes that they will soon release a Source Code Debugger as well as fix the Editor bug. I

find that the WERCS RSC Editor is very complete and bug free. The LC5 Library is simply superb.

I switched from the Mark Williams C compiler (which does have a source code debugger) to the LC5 compiler mainly because I needed an ANSI compatible compiler. If that is your requirement then I highly recommend the LC5 package from HiSoft.

Next week, I will start a series of articles showing how I ported a C Printing/Formatting program to the ST first as a TOS Take Parameters (TTP) program, and then in later articles as a GEM based program and finally as a Desktop Accessory/GEM program utilizing the auto- detecting feature of LC5. In the process I will describe some of the many LC5 Library functions which make the LC5 so fun to use. Future columns will show how I use the Beckmeyer Tools to enhance the development environment by adding a true UNIX C Shell, MAKE, and other UNIX Tools. Later, I will show how the Beckmeyer MultiTasking C Shell can be used with the Lattice C compiler. I will first document various Libraru functions unique to LC5 and show how to use them. I will work you through the development of a GEM RSC file and present a skelton C file for use with LC5. Hopefully I will be able to show just how valuable the LC5 package is through an actual program.

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> DENNY HAYES STR FOCUSâ ¢ \* EXCLUSIVE! \* "...if I single someone out..."  
=====

#### THE PRICE OF COPYRIGHT VIOLATION =====

STReport has obtained directly from DENNIS HAYES his very own statements concerning his arrest and ultimate conviction for copyright violation.

by Dennis "Denny" Hayes

#### Part II =====

Well, as I stated, that's the statement I wrote, but was later advised not to read, because the government doesn't like you to say bad things about them. I was charged with copyright violation which carries a maximum of one year in jail. A charge of, what is called, structuring which



carries 5 years max was added, which says any money transactions you do, can't look as if you intend to not pay taxes, whether you intend to or not. And a final charge of money laundering which carries 20 years in prison max, because I bought things with my money, even though most of it came from my checking account, and into my checking account legally, and was on bank records. For you intellectuals interested in the law, here are the charges, and the laws supporting them:

\* \* \* \* \*

#### THE CHARGES LEVIED

##### COUNT 1 - Money Laundering of Monetary Instruments:

That from on or about October 1988, up to and including July 17, 1990, in the Southern District of Ohio, Dennis W Hayes, did knowingly, willfully and with intent to engage in conduct constituting an attempt to or evade or defeat payment of income tax (Ref 7201), conduct and cause to be conducted, financial transactions affecting interstate commerce, knowing said financial transactions were conducted with property, to wit: United States currency, and checks that were the proceeds of specific unlawful activity, that being the infringement of a copyright. This is a violation of USC 1956(a)(1)(A). Ref: 7201 Attempt to evade or defeat tax (I wasn't charged with this).

Any person who willfully attempts in any manner to evade or defeat any tax imposed by this title or the payment thereof shall, in addition to other penalties provided by law, be guilty of a felony and, upon conviction thereof, shall be fined not more than \$100,000.00, or imprisoned not more than 5 years, or both, together with court costs of prosecution. Ref: 18 USC 1956(a)(1)(A) Laundering of monetary instruments.

Whoever, knowing that the property involved in a financial transaction represents the proceeds of some form of unlawful activity, conducts or attempts to conduct such a financial transaction which in fact involves the proceeds of specified activity with the intent to promote the carrying on of specified unlawful activity, or with intent to engage in conduct constituting an attempt to evade or defeat payment of income tax, shall be sentenced to a fine of not more than \$500,000.00 or twice the value of the property involved in the transaction, whichever is greater, or imprisoned for not more than twenty years, or both.

#### Comment:

This is one of the laws pushed through under the excuse that we need to stop the drug dealing gangsters. It's even under the controlled substance act. But we see where they use it.

In other words if you make illegal money, it's one violation, and if you do anything with the money you make, it's a greater violation.

It's interesting that an attempt to evade or defeat the tax carries only 5 years, but looking as if you might not pay your taxes carries 20 years. Actually I've found that actually not paying it (IRS Code 7202) also only carries a 5 year sentence.

\* \* \* \* \*

COUNT 2 - Copyright Infringement:

From on or about October 1988, up to and including July 17, 1990, in the southern district of Ohio, the defendant, Dennis W. Hayes, did willfully and for the purpose of commercial advantage and private financial gain infringe the copyright of Apple Computer Inc. of Cupertino, California #TX1640052 protecting the computer program stored on a 128K ROM computer chip, in that the defendant, Dennis W. Hayes, did cause the protected computer program to be copied onto blank computer chips, without authorization of the copyright holder, in violation of Title 17 USC 506(a) and Title 18 USC 2319(b)(3) Ref: Title 17 USC 506(a) Copyright infringement.

Any person who infringes a copyright willfully and for purpose of commercial advantage or private financial gain shall be fined not more than \$10,000.00 or imprisoned for not more than one year, or both.

Comment:

This one I'm obviously both morally, and legally guilty of, even though I was told I could only be sued by Apple.

\* \* \* \* \*

COUNT 3 - Structuring Transactions to Evade Reporting Requirements:

On and between June 8 and June 29, 1990, in the Southern District of Ohio, the defendant, Dennis W Hayes, for the purpose of evading the reporting requirements of USC 5313(a) requiring domestic financial institutions to report currency transactions of \$10,000.00 or more to the United States Department of Treasury, did knowingly, willfully and intentionally structure and assist in structuring a transaction with one or more domestic financial institutions in that the defendant, Dennis W. Hayes, purchased and caused to be purchased with United States Currency, four cashier's checks in the amount of \$9,000.00 each, payable to the Union Bank of Switzerland, in violation of 31 USC 5324, and 5322(a). Ref: 31 USC 5324 Structuring transactions to evade reporting requirement.

No person shall for the purpose of evading the reporting requirements of section 5313(a) with respect to such transaction structure or assist in structuring, or attempt to structure or assist in structuring, any transaction with one or more domestic financial institutions.

Ref: 31 USC 5322(a) Criminal penalties;

A person willfully violating this subchapter or a regulation prescribed under this subchapter shall be fined not more than \$250,000.00, imprisoned for not more than one year, or both.

Comment:

To make a law that you have to tell the government about all your financial transactions whether you pay your taxes or not, sure seems like a violation of the Constitutional right to privacy. But from a moral point of view it's not a bad law, as long as the information is used fairly and evenly, but if past history is any indication, and as in this case, it will be used as a means to increase the sentence for a crime above what the creators of the primary violated law intended when they laid down the sentence for the violation, and any other

purpose which suits the governments needs.

\* \* \* \* \*

The following is the statement of damages from the Pre-Sentence Investigation report:

The primary victim in this case is the Apple Computer Company. However, the impact on Apple is unknown and may never be quantified. According to a representative from Apple's legal department, the defendant's behavior is not widespread. Nevertheless, Mr. Mark Aaker, attorney for Apple, suggested for each counterfeit part that Hayes sold, potentially represents one MacIntosh computer not sold by Apple. The attorney was quick to point out, However, that he was unable to produce the percentage of those individuals who would have spent over \$2000.00 for a MacIntosh computer had they not had the opportunity to buy the defendant's relatively cheap set of computer chips that would "convert the purchaser's inexpensive computer" into one as powerful as the MacIntosh.

A second victim impact expressed by the attorney for Apple concerned the fact that Hayes has virtually flooded the market with his fake computer chips. As a result, this may cause Apple a severe service problem in the future when individuals, thinking they have actual Apple computer chips, begin to send the faulty ones in to Apple for warranty work. Mr. Aaker indicated that at present such losses cannot be estimated.

Finally, Mr. Aaker related that the primary harm caused by Hayes was that he provided an opportunity for others to do the same thing, and therefore, advanced "the bad intent of others and facilitated additional fraud." The US Government was a secondary victim because of lost tax revenue due to the income generated by Hayes. The government, however, has not charged Hayes with any tax violations.

Comment:

They admit they don't know if there were any damages to Apple except that if I get away with what I did someone else might do the same, or that Apple might worry about repairing a part that only cost them one dollar. And I really don't understand how the government was damaged, since they didn't wait to see if I was going to pay my taxes or not, and they took over \$300,000.00 from me, which left me broke. I'd say they were the winners.

\* \* \* \* \*

#### Hayes Summation =====

In the past few months, I've seen so many laws like these, which the average person doesn't know about, that when I now hear a person say, I'm doing nothing wrong, they can't get me for anything, I start to feel sick.

To summarize, the lawmakers of this country are passing laws, under false pretenses, in an attempt to drastically increase the penalties. Thereby circumventing the penalties written into the original laws, for violations of these original laws.

Then in an attempt to make the application of these laws fair, they are

then structuring the application, to suppress the normal human moral opinions of both the law enforcers, and defendants, while at the same time, using these same opinions to pass and enforce these very same laws.

Your guilt and sentence is now decided by the prosecution, who decides what you are charged with, with a little adjustment for your past history, and how much you are willing to help them nail (accuse & convict) others. And with a big adjustment for your wealth and popularity. And the democratic controls of appeal are by-passed, by their unaccountability. The only hope you have is to get your attorney to attempt to negotiate the sentence down from the 1000 year sentence you start with. And you are supposed to feel satisfied with a big reduction to 26 years max on a charge that should have had a max of 1 to 5 years to start with.

The investigators are just doing their job, and the judge then has to follow guidelines he may not even agree with. Give it a few more years, and we can replace the judge with a computer. You will never be able to replace the system with a computer however. If you did, it would charge everyone with every law they violated, and over 75% of the population would be sentenced to over 1000 years in jail, and the average life span isn't up to that point yet.

They look around, and say, but we are making life better for everyone. No, they are making life better for the people who can hire a team of attorneys to guide them through the obstacles, and at the same time destroying the incentive for anyone below them to be creative, take risks, and thereby improve society. If they are really doing what they say, then why are recent reports saying the gap between the rich and the poor has tripled in the past two years. And, they can't seem to understand why people take drugs to escape, or why the teenage suicide rate is up. They can't understand why there is so much apathy in college today, yet they can see what it has done to Russia.

The students themselves in a two hour special on TV said why try, they tried to improve things in the 60's and they wasted their time. And any gains they may have made have since been taken away. Look, I know the drive for one person to impose his wills on another, has always been here, and I doubt that it will ever change. We don't understand, therefore like, anyone who is different than us, which causes us to want to knock them down. Why can't we let people alone unless they are hurting someone. And if they are really hurting someone, make them show it, or at least file a complaint. Not just prosecute someone for breaking laws because it sounds like something to do, or that someone is making more money than another.

If the law is intended to protect the people, why do the charges, and the sentences depend so heavily on how much profit the individual makes, as if the real crime is making more money than the next guy, rather than on the damages caused. Or is the system too inept to find the damages caused. Under this system, I understand I received an additional year because I made over \$300,000.00. If it is your idea, of an attempt to make things fair, boy are you missing the boat.

They get away with it because, no one really cares enough, or is too scared to say anything until it affects them directly. Well, give it time, and it will. And you can take that to the bank.

To make matters worse, my charge didn't even fit into the system. When I was officially arrested, they tried to enter me into the crime computer, and there wasn't even a category for me. So they put me under miscellan-

eous something. The people charging, and defending me don't even understand the computer world. Other than the word processors their secretaries use, they do everything with paper, pencils, and voice recorders. They couldn't make a rational judgement on anything having to do with computers, if their life depended on it.

In my case, they had to hire outside help to try to explain to them what I was doing. And I know for sure they still don't really understand. They use terms like rails for the plastic tubes which computer chips come in. They talk about the cost of repairing a computer chip as if it were a machine you could take apart, and fix. They took all the logic chips I used in designing products, while I was in the design business, since they didn't understand the difference, and because they looked like the other ones I had. I even had a box of Atari floppy drives, and it seems their expert didn't know what they were, because they had to ask me what they were. This I really can't believe, however. It sounds more like a communication problem to me. And my attorney told me they didn't have a precedent on my crime to base anything on. By the sentence, it appears I fit in with murderers, and drug dealers, somewhere.

Let's see, I violated a copyright, and I did things that made it look as if I might be able to try to cheat on my income tax which everyone knows was an attempt to hide my finances from Apple. And I actually didn't file for a few years prior, although I made no money.

The maximum sentence for copyright violation is one year. The maximum sentence for actually lying, not paying, and cheating on your taxes is five years. And somehow I ended up with a twenty-six years charge, while Pete Rose, who actually cheated, and admitted it got 5 months. Hmmm.. Must be some new kind of math. But I guess I'm not quite as bad as Al Capone, however. He received 11 years.

Now I've been sentenced to five years in prison, after which I have to spend two years on probation, and I must see a psychiatrist for ten months of the two years. What this is for I'm not sure. I'm guessing it's because I thought about killing myself a few years ago. But if that is what they are worrying about, why do they want to wait five years to see if I'm this nuts. It makes me wonder who is really nuts. Well I hate to bust their bubble, but I've been knocked down, kicked, stomped on, and rolled over so much, I don't believe anything they could do would ever again make me want to do that. I have my moments when I really get upset, and now I've got ulcers, but the more they stomp, the more determined I get to fight back.

I was told, by my attorney, that I received an additional two to four of the years for deciding not to help them ruin other people's lives who were helping many and hurting no one. In fact I called xxxx secretary, and told her to tell xxxxxxxx to watch what was said because the FBI was probably investigating..., they told me they could bring additional charges against me for obstruction of justice. I wonder what Daniel Webster would say about this use of the word justice. xxxxxxx, being the xxxxxx he is, called the FBI, and told them I had called, to make himself look good. The only thing I have left is my own self respect. They have taken everything I own, my money, my house, my car, and now the best part of my life (my daughters). They will grow through the most important part of their life without me. I may have made some mistakes, but I hurt no one, and helped thousands, and for that they want to destroy me, and my family. But I am not going to help them, in any way, do the same to anyone else who is not hurting anyone, even people like xxxxxxx. If you think this is really a free country, you need mental help. You are free, as long as you

are a puppet, and don't upset any of the big boys.

Folks we may as well bend over when the big corporations tell us too, then spread when they tell us too. If you try to fight the system, you lose. I wonder if I had a copyright, and Apple violated it, if Apple would go to jail. But, I did have an emotional collapse a few years ago, and set myself up for it. Though the fact that they could have done what they did anyway, scares the hell out of me.

I have three wonderful daughters. Summer (13) who through my encouragement, has pursued her dream of becoming a gymnast, since she was 6, and is now a level seven on a 1 to 10 scale where a level 10 is preparing for the Olympics. She will now have to quit, because my ex-wife will not be able to afford it on her income without me. She also runs straight A's in school even though she has only an average IQ, because I spend the time to help her. My ex-wife isn't too sharp in math, science, etc, so I'm sure these grades will drop. She is also the most emotional, and I really don't know what missing me will do to her.

The next oldest is Shanna (11). She also gets mostly A's in school, but where Summer has to work hard in gymnastics, Shanna is a natural athlete, and has been taking skating since she was 2. I watched her do a Christmas ice skating show for the public downtown on Fountain Square yesterday, and she was so good I had a hard time holding back the tears, knowing she will now probably have to quit.

Now there's Maegan (8). She's the artist. She doesn't seem to like Athletics much, but give her a piano or keyboard, and she'll really surprise you. Fortunately, I don't think she will need to stop. Piano lessons aren't that expensive.

I have to grit my teeth to say it, but, "Merry Christmas, Merry Christmas, Merry Christmas, Merry Christmas, and Merry Christmas." That is one for each year I must spend in prison. And don't let anyone fool you by thinking I'll only get a year or two. There is no parole in federal prison anymore. You get a few months off for good behavior, but that's it. And I'm told, if I agree to help them destroy the lives of others, I might get a little more time off. I have to report to the prison on 1/8/91 for five years. But, I'm told, the least I could get is 2 1/2 years, and just to save my butt a little I'm not going to do this to other people's kids. I'm sorry if this makes me appear unpatriotic, but I don't feel too patriotic at the moment.

Merry Christmas again, and see ya in a few years. I wonder what computer systems will be like in five years. The way I feel now, I'm not sure I ever want to see one again.

Dennis W Hayes  
7048-47 Waterview Way  
Cincinnati, OH 45241  
Phone 513-779-7998

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> ATARI HERE TO STAY! STR FOCUSâ € "Different strokes for...."  
=====

# ATARI vs IBM =====

by David Pischke

-> GEM is fun? Baloney.

Whether GEM is fun or not is totally subjective. You cannot tell me that I or any number of Atari users do not find GEM fun -- many do. One person may find a roller coaster ride terrifying, another may find it a wonderful experience. That does not mean that either one is wrong.

-> And typical users do not need to spend hundreds of dollars on  
-> utilities that simply make GEM more usable.

I haven't spent hundreds of dollars to make GEM more usable. I spent \$20 on Quick ST and \$35 on NeoDesk. Hardly "hundreds of dollars". I believe there is a package of utilities for Windows which includes things such as a screen saver. I understand the cost is about \$50 -- approximately what I spent on the utilities that I use to make life on my ST easier.

-> Baloney! First of all, the open architecture of the PC machines allows  
-> anyone to add memory, add a hard disk, add a parallel interface,  
-> add a graphics cards, etc. very easily ....

Anyone can add memory to the TT easily, or add hard disks (it has both SCSI and DMA ports). The TT also has a built-in hard disk. The VME slot is there so that graphics cards and other devices can be added very easily. It is my understanding that a company in Germany has already produced a card cage which allows the use of up to twenty cards. In addition, the TT has the most open architecture of any Atari computer.

-> You are not paying for features .. that will never be used (such as  
-> the STE's new and unused joystick ports)

You started out comparing the TT to PC Clones. Don't switch to the STE in the middle of your argument. By the way, the TT does not have the "new and unused joystick ports".

-> What really cracked me up was the comment that Windows was not compatible with much software while the TT was. It's more like the other  
-> way around by his own admission.

I believe his comment was that quite a bit of software does not utilize the Windows interface, not that it was incompatible. If those were not the exact words, they were more likely than not the intended meaning.

-> Comparing a PC that exists now to a machine that might one day actually  
-> hit the market is not fair ... I don't see a TT on sale at my Atari  
-> dealer so I can't suggest to anyone to delay purchasing another com-  
-> puter in the hopes that the TT might ship one day.

The TT is at dealers all across Canada. I have seen, touched and tested it with my own hands, and I am an everyday Atari user -- not anyone special that would have any special access to a TT. Of course, being an expatriate living in the US, you wouldn't know about the TT shipping in Canada.

I understand that the TT is available to the public in Europe as well.

-> Folks, if you're going to comment, please research what you say.

I'd suggest the same for you, Mr. Mihocka.

Final comments:

It doesn't surprise me that Darek Mihock bashes the Atari line of computers in favour of Microsoft Windows and MS-DOS, considering that he works for Microsoft. Can we really expect him to report objectively?

Most all users will admit that Atari, the company, has not treated its developers, dealers or user base with what can be considered great friendliness. However, by Mr. Mariano's own admission, the Atari line of computers is "The best kept secret in the computer world". He thinks that there is sunshine on the horizon and that the Atari market will re-materialise.

I feel, as I think he does, that the Atari is a great computer. Many people love their Ataris and feel that it IS the best computer out there. Do not mix up the bashing of the Atari company with the bashing of the Atari computer.

Thank you for your time.

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> STR Mail Callâ €  
=====

LETTERS TO THE EDITOR

30-DEC-1990 16:18:59  
From: BOS1B::TRAHERNE  
To: RMARIANO  
Subj: ST Future(?)

NEWMAIL

Hi Ralph.

I met you at the Boston AtariFest and was quite impressed with your



candor and even-handedness concerning things Atari.

Is Atari dead in the US? On one end we have the folks like you who seem to see good things ahead for us, but in other areas we have people telling us (Current Notes) that all that's left is for the sod to be laid over the gravesite. Then we have good programmers like Darek Mihocka showing us how to use Windows on the IBM and telling us how obsolescent the TT030 is already.

I realize that you probably hear this every day at least five times, but I thought I'd air my concerns as well. By the way, I love ST Report and the timeliness of its reporting. I really think that our best weapon right now is the user group - we've got to carry the flag forward or we don't stand a chance. Keep up the good work!

Dear Reader,

Atari is far from dead, they are heading toward new and attainable goals that will provide a great forward thrust for the US and worldwide market. This is the new beginnings, the Mega STE and the TT030 will certainly be very strong in the months to come. Thank you for reading STReport!

Ralph.....

Item	2939135	90/12/30	06:37
From:	D.SCHREIBER3	David E. Schreiber	
To:	ST.REPORT	Ralph F. Mariano	
cc:	D.SCHREIBER3	David E. Schreiber	
Sub:	Darek Mihocka		

Why in the world do you continue to publish those articles by Darek Mihocka? I can see some vague rationale for the first one, as Darek is a high-profile Atari programmer and he had something to say about Atari's claim to offer "power without the price." But he is going increasingly away from topics relevant to Atari users with his paean to Windows (isn't it peculiar that he happens to work for Microsoft?) . I do NOT look forward to next week's promised article describing the marvels of IBM software. (I wonder if Microsoft products will play a prominent part in his discussion.)

I suppose you could maintain some sense of proportion if you follow Darek's articles with a similar series on the excellence of Macintosh products, then do a similar treatment on the Amiga, Unix, Etc., etc..

What is obvious to every one of your readers is that Darek now feels he has graduated from Atari into "the big leagues" with Microsoft and the IBM. His articles are little more than boasting - "Look at me, little Atari people, I have gone way beyond you." I wish him well, but since he chooses to show near-contempt for Atari owners, I do not wish to hear from him. (As a side issue, I mention a similar attitude he displayed after leaving Canada for Oregon or Washington or wherever he is now. He wrote, "I have left Canada and hope never to return." It is a remark typical of his attitude - immature, self-preening and contemptuous.)

Please do not continue the articles by Darek. They are of little interest to Atari owners and they have a rather offensive edge to them.

In Darek's current article on Windows, did you notice how he was very dismissive of utility programs for the ST like HotWire, DC Desktop, etc. but singled out Quick ST for a special note of praise? I wonder why Quick ST stands out in his mind head-and-shoulders above all the others?

I should have mentioned in my earlier message that I am a Canadian, so I viewed his remark about hoping never having to return to Canada with a Canadian's sensitivity. Darek benefited from an education payed for by the Canadian taxpayer, was allowed to attend the University of Waterloo, one of the best computer universities in North America, from which major computer companies regularly do bulk hiring. It is too characteristic of him to show no appreciation of what others did for him.

(Sorry, that's getting a little too personal. We here at the Toronto Atari Federation, of which I am currently ST Vice-President, have known Darek for a number of years and, while admiring his considerable accomplishments, have also had to put up with a certain degree of grating self-centeredness from him.)

Dear Reader,

Its a shame that a few folks perceived the windows series as a threat. The entire effort was to get the userbase's juices running and provide food for thought. This it did and did well. Not only was the entire ST userbase served well, they were given plenty of good information for use while enjoying Windows 3.0 with their favorite IBM/MS-DOS emulator. No need to apologize, everybody gets worked up at one time or another. Thank you for reading STReport.

Ralph....

Item	9661860	91/01/01	11:05
From:	T.DIBIASE	Tom A. Dibiasse	
To:	ST.REPORT	Ralph F. Mariano	
Sub:	DEREK'S ARTICLE		

Dear STReport,

I just wanted you to know that I really enjoyed this last issue #652. The main reason I enjoyed it was because of Derek's continuation on the IBM clones and Windows 3.0. I have enjoyed my Atari 1040 for about 2 years now but have always wondered if I would ever get another Atari if I was in the market for another computer. You have to admit it, it would be nice to be able to go anywhere and by software and see all the latest stuff for your computer instead of having to read about it in Start or STReport.

After using a windows environment, I would not want to have to take the time to have to learn DOS commands. I refuse to pay for the overly priced MACs since not only are their computers expensive, but their add-ons and software are sky high! Now that there is Windows 3.0 for the IBM, there is no reason Not to take another look. I was looking forward to seeing the TT030 come out and was curious what it was going to be priced at. The other day I got an advertisement from a computer shop saying that a 2MB TT with a 50meg HD was \$2300 (when they get them!) and that was with- out a monitor! Plus, I saw the graphics on the TT and I think they're outdated already! With IBM, 800x600 or so graphics with 256 simultaneous colors is becoming the normal thing. With the TT's 256 on

only 320x480 and only 16 on 640x480, it pales! Do they actually think that there will be an enormous amount of graphics boards coming out for the TT to take care of this? Maybe a handful at most until a majority of them go out of business!

I've looked around at clones and they are coming down in price daily. Anyway, now that I got off track! I think Derek's article is a breath of fresh air. So many Atarians are so locked up into their computers that they are unwilling to see what else is out there. I wonder if these are the same people that will only buy one brand of car instead of looking at what the other models out there are offering at the same price. It's the same with computers, we should shop around and not only look at different configurations but look at other brands besides Atari! I've watched the Atari market long enough to know that things are not going to change for the ST/TT models much. Anybody foolish enough to believe Atari's promises about that are not much in tune with the rest of the world. Keep bringing articles like Derek's in your weekly report so we can see what else is out there and COMPARE things for OURSELVES what we need and what we want. Let's open our minds a little to what we might really be missing out there if we were to only focus on Atari!

Thanks, Tom D.

Dear Reader;

You sir, provide the breath of fresh cool air.. I am eternally grateful for you insight and kind words. We need more folks like yourself helping others to appreciate the ST/TT Atari line of computers. Thank you for reading STReport. Kepp the faith.. Atari is alive and well.

Ralph....

---

> WINDOWS, WHY? STR FOCUSâ € "Atari users ..hang in there!"  
=====

MIXED EMOTIONS  
=====

by M. Hill

After reading Darek's series of articles I had a bad taste in my mouth. I could not believe a developer for the ST/STE/TT line of computers would be saying the things he was saying! Even if what he was saying was true, I could not believe he would take the chance of losing the support of the users out there. And with the ST we know you need all the users support you can get if you want your product to survive.

Darek makes a lot of points, some good, some bad. I really think someone who works for Microsoft should not be comparing the ST and a 386 with Windows 3.0. I have a Mega ST myself and a 286 with a VGA monitor. I work full time as a C programmer for a company that makes analytical instruments, so I have no stake in anything in either the Atari or IBM realm.

I would like to comment on some of Darek's points and hopefully make some of my own.

I use IBM's at work all the time. We have 286's, 386's, and even some old XT's. We use them for CAD/CAM, and Circuit Design and they function flawlessly for this. At work I use a 386 running SCO UNIX for my development system. I also have a 386 at work I use for Circuit Design, and some programming with Turbo C. I feel I have a good knowledge of the IBM's and since I have been an Atari user since the 8-bit 800 came out in the early 80's I feel I know a lot about the ST's.

I do not use my AT at home much at all. My wife uses it more than I do and she uses it to manage our Checking account. I just find the ST a more enjoyable machine to work with. I love the GEM environment and feel it is ever soooooo much nicer to work with. DOS just does not compare and windows is really a joke.

Lets talk a little about Windows. We have 3.0 at work and use it on our Desktop Publishing Station. I set up Windows and Page Maker since we had not hired a Technical Writer yet. I won't go into all the problems out there with configuring ANY IBM with software and hardware for it. For the typical user, playing with Interrupts and working with Base/Extended/Expanded memory is a real challenge. ST's are so simple to set up. You just plug em in and fire em up. Anyway back to Windows, when I first booted up Windows I was impressed with the crispness of the VGA display and the look of Windows. This impression was short lived though. I started looking for the trash can, hmmmm where was it??? Oh well lets try to copying some files. What! I can't drag actual file icons from window to window? The File Manager is simply a joke. I can only assume Microsoft did this because of fears of being sued by Apple.

I do not want to count the number of times the Technical writer came up to me with questions about why there were messages on the screen saying things like "Abnormal Program Termination" and the machine would jump back to Windows or DOS or possibly lock up. Now this may be because of Page Maker or Windows. But this happens a lot to our Technical writer.

Now Darek talks about Windows ability to Multitask. While this is nice in certain applications I do not find this something that would influence me to buy a computer. Multitasking is nice for certain applications but how many times does a typical user actually use multitasking for a practical purpose. I find Task Switchers more than enough for my tastes. Revolver is a BRILLIANT task switcher for the ST. Now the old ST/STE's do not multitask, there are programs which give you this ability in limited fashions but none are worth bragging about. But you have to remember that these are Atari's OLD systems. Just like the XT's are the old models from IBM. You will not find Windows 3.0 running Page Maker on a VGA monitor on an IBM XT. Now the TT will run UNIX so there is multitasking if you want it. X-Windows is a much nicer environment to use than Windows from Microsoft.

Now the TT will have GEM running on it and probably will not multitask

GEM programs as is. Either does an IBM multitask DOS applications. You have to buy Windows if you want to do that. Well with the ST you can purchase Unix and Im sure someone will come up (Atari maybe?) with an enhancement like Windows that when loaded will allow you to multitask too. Remember we have the memory now to do this.

On another note, as for ease of use I just find it so much easier to be able to access all the memory I have in my ST in one sweep. The 640K limitation on the IBM's is a real crutch in my eyes. It makes the system inherently complex to the new user and can cause some heartaches for the experienced user too.

Now on the hardware side sure Darek you can buy a 386 setup as you describe, BUT where are the Midi ports? Where is the VME Bus? Where is the Math Coprocessor? Where is the LAN port? Where is the built in SCSI port? Where is Stereo sound? This all comes with the TT and adds up to some bucks if you want to add this to your IBM system?

I do not buy the statements like "What do I need with Midi Ports, or a VME bus, etc". In the world of computers you just dont know down the road what you might want. I dont know how many times I said to myself "I will never need more than 512K". Then I needed more so I sold my 520 ST and bought a Mega 2. Then I said "I will never need more than 2 megs". Well then I started messing with DTP and bought myself a SLM804 laser. Well soon my Mega 2 was a Mega 4. To say that just because something is included that you will never need it is absurd. There are a lot of possibilities of things that could be designed for ST users using the Midi ports or the VME Bus. Now a developer can say "Hey I can build a low cost Digitizer using the VME bus, and I know all users already have the VME bus on their TT". My philosophy is this. "Hey, if you want to give it to me I will take it!"

Now we all know Atari has it problems. The fact that the ST's are not as popular as we know they should be, is fact one that Atari is having problems, but I ENJOY this computer and look forward to purchasing a TT. I have my IBM 286 and wish I never would have bought it. Darek, Ill sell you my 286 anyday. Ill buy one of those new AT emulators for the ST anyday. Heck with one of those and the GCR I already own Ill be in HOG heaven! And when I buy my TT I can plug that GCR right into it!

Basically I wrote this to settle myself down and hopefully settle down the stomachs of all those Atari users out there that who in Bart Simpson's words "Had A Cow" after reading Dareks article.

All I can say to you Atari users is hang in there. We have the BEST computer around and hopefully this will be Atari's year. With a system as powerful as the TT is we can not lose!

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> WINDOWS, REALLY? STR FOCUSâ €  
=====

"....Windows is nice but..."

## A LOVE/HATE RELATIONSHIP

=====

by Roger D. Stevens

As a one time Atari ST user and avid fan of the machine, I sit down to write this article as a MS-DOS machine user now. I made the switch for business reasons. Being a developer of database systems, I was forced to target my efforts to the installed base of DOS machines in use in the business environment.

The recent rash of comparisons of GEM and Windows 3.0 has prompted this article.

I use a 20 Mhz 386 machine for program development. I also do quite a bit of BBS calling just to remain current in the MS-DOS world. Quite a number of the boards I call are part of the RIME network, a national network of message bases covering a myriad of topics. I purchased Windows 3.0 shortly after its release and have been following the windows conference closely for some time now.

It seems there are basically two opinions of Windows 3.0 from users in the base. They either (1) Love it, or (2) Hate it. The wide range of emotion here seems to stem from the fact that for some, it works just great and does everything advertised, while others have nothing but problems and heartache trying in vain to get it to operate. I make NO claims as to 'guru'-hood, but, I have installed Windows 3.0 on my system and have gotten it to do everything I expected of it with no problems. There is one area of dis-satisfaction, but more on that later.....

From my casual viewpoint, it seems clear to me that those having the most the problems with windows are doing so because they failed to follow the most important rule... READ THE MANUAL. Windows is far from a simple program that you just copy to the hard drive and go merrily on your way using it. Some very diligent study of the manuals is REQUIRED if you expect any semblance of success. Windows has some very strict hardware requirements, especially for the 'enhanced' mode. Many users are trying to utilize these advanced features on 80286 and some 8088 machines when it just isn't possible. If you meet all the hardware requirements and have thoroughly read the manual, you should have no problems making Windows do your bidding, on the other hand.....

Windows 3.0 does what it was designed to do. The colors and graphics are great, the multi-tasking is great, the Windows specific applications are super (although EXPENSIVE), but, it does have one major drawback I hate. It seems it was designed with the assumption that users would gladly fork out the money for the latest technology to use it effectively but they completely dropped the ball in the communications area. Many people, including myself, who have this type equipment gave up 2400 Baud communications long ago. I use a Dual Standard HST and Windows absolutely chokes on anything above 2400 Baud. Sure, there are buffered UART's (16550's) out there to alleviate this problem but Windows was not designed to recognize or use this capability. The result....constant errors and SLOW downloads while running my comm program in windows.

It's nice to be able to load Windows and use some of the more advanced

capabilities of my machine (beat the dreaded 640K DOS limit) but the hardware and software requirements are prohibitive for the 'average' user. The end result is that I am just a 'casual' Windows user and drop back to DOS when I have some serious work to do. I am just more comfortable at the command line level where almost anything can be done with a few key-strokes. Windows 3.0 is a nice toy, and in some cases, the ONLY answer for serious applications, but for this user - DOS is still the mainstay.

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> ATARI IS... STR FOCUSâ € ...."to be or not to be"  
=====

WHY IS ATARI THE CABOOSE??  
=====

by R.F. Mariano

Advertising Bunky, plain and simple! ADVERTISING! Why just the other day, (how many times have you read that before?) I was talking with an avid IBM'er who pointed out the PC1 is a dog. Since he was and is a fan of Atari too, he said that with a gleam in his eye. I felt he was telling me this to "humor" me so I asked for some basis for his opinion.

Folks, He quickly pointed out that this was not his opinion but the general consensus among the rather large IBM userbase. Asking a few more of the more well informed users will produce the most amazing array of answers conceivable.

For example;  
-----

- a - Its about as "good" as the PCjr was!
- b - The PC1 is a dead-end design.
- c - Its a GIANT backward step in technology!
- d - Its an insult to the intelligence of the consumer!
- e - Its IBM's best footshot!
- f - Advertising is selling it ...not quality!

As one can easily see, the basic opinion is the PC1 is really no where near being the "Cat's Meow". Why then is IBM making such a deep impact in

the marketplace with this machine? EASY! ----> ADVERTISING! Everyone has seen at least one ad for this "state of the art", "machine of tomorrow" that's available today. The 1040ste easily blows this 'bucket o bolts' away. In fact, the 1040Ste can almost do it while its turned off!

Then comes the Apple babies.... or, is it Candy Apple babies? Oh sure buy the Classic... The Amiga and ST killer! Excuse me while I barf all over that idea! After all the smoke and double talk clears.. we find that the new "Classic" user has sprung for a small fortune and is quite proud of his 'new acquisition'. Let's bust his bubble, ask how easy it is to switch to a color monitor. It cannot be done! Amazing! Another screw in the head of "Joe consumer", it takes a whole new system to go color from a Classic system in the "MAC-A-ROON" world.

Getting back to reality, the complete Atari line of computers has more to offer in the way of versatility, ease of use and power than all the comparably priced systems available today. Why is it more folks don't know about this marvelous machine? Atari's excellent line of computers is indeed this country's best kept computing secret! Certainly, its not meant to be that way... but that's how it is.

STReport is not about to encourage anything 'original' like "evangelism" (where have we read that before?? ...Sam?) All we ask is that each and every one of you read the item in this week's issue from the AUA that carries a form letter to send to Byte Magazine. In addition to sending a copy to Byte's editor, send a copy to Sam... Its a nice way to let Sam and the leaders at Atari know that we DO care and darn well care a great deal about the future of the machines we use and support! So please, send that letter out ASAP to both Byte and Atari.

---

> BYTE LETTER! STR Spotlightâ € "Hey! We're still here!!"  
=====

ATARI IS NOT GONE OR FORGOTTEN!  
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By now, many of you are aware of the recent article that appeared in the October issue of Byte Magazine which outlined "the top" DTP packages available. The article outlined the IBM (and clones) as well as Macintosh platforms as excellent mediums for DTP, but failed to even mention the Atari ST and the fantastic DTP software available for it. We are mad, and we are rather tired of the ST being the "forgotten" computer. You CAN make a difference here by participating in this massive letter writing campaign that is expected to be supported by a very large number of loyal Atari ST users. Your help can make a difference! This is YOUR chance to



be heard and to help correct the problems we are facing today: lack of recognition and lack of support!

Take a moment to read the following letter addressed to the editor of Byte magazine. Then, with a word processor, add your name to the bottom of the letter, print it, sign it, and drop it in the mail. This is a great opportunity for your voice to be heard! You have over 1100 members of the Atari Users Association behind you, and thousands of others are expected to participate! Don't wait, DO IT TODAY!

REVISION 2

-----CLIP HERE-----CLIP HERE-----CLIP HERE-----

Byte Magazine  
Attn: Fred Langa, Editor in Chief  
One Phoenix Mill Lane  
Peterborough, NH 03458

Dear Mr. Langa,

I am writing to you in regards to your comparison of different Desktop Publishing packages reviewed in your October 1990 issue of Byte and to express my disappointment and frustration in your complete failure to mention the Atari ST computer and its tremendous DTP abilities.

I have been a long time Atari ST owner, and reader of your magazine, and I was very disturbed to find that in your October issue you compared different software packages on the IBM and Macintosh computers and completely ignored the Atari ST. This editorial decision continues your long standing tradition of ignoring the Atari ST, even in areas in which the Atari ST excels.

Although the Atari ST has been available for over five years, the coverage that you have afforded it has been meager at best. While I realize that the number of Atari ST's sold in the United States can not compare with that of the IBM PC or Apple Macintosh (although this is not true world wide), it is unfair to the people who own Atari ST's, or people who would like to purchase a system that is different then the above mentioned computers that you continue to ignore this 68000 based computer. How can a consumer make the right computer buying decision if they are not given all the facts about the systems that are available to them?

I know it would be overly ambitious to expect to see an equal amount of coverage that the IBM or Macintosh receives, However, I would expectantly look forward to reviews of major software and hardware packages, such as ISD's Calamus or Outline Art, Soft Logik's PageStream, Wordperfect for the ST, Goldleaf Publishing's Wordflair, Borland's Turbo C, Migraph's Touch-Up, or the many, many other high quality software packages, not to mention hardware upgrades such as GBS's Spectre GCR Macintosh emulator, Talon Technologies' Supercharger IBM emulator, ICD's Advantage Plus hard drive host adapter, Fast Technologies Turbo 16 accelerator, Moniterm's 19" or Image Systems 24" high resolution monitors. These fine products deserve the fair, accurate and in-depth reviews Byte is so famous and respected for.

You may not be aware that hundreds of thousands of ST's have been sold in the United States and Canada, and nearly a million in Europe. Your magazine could possibly increase its readership and circulation if you were to dedicate a monthly column to the Atari computer line and provide the much needed coverage of an excellent, affordable computer to users and prospective buyers who are starving for information.

While I will continue to purchase your magazine in the future it will be in hopes that you will begin coverage of the Atari ST as you do the other systems mentioned, I encourage you to give fair and accurate coverage to the Atari ST line of computers. I do hope that you will give Atari's new computers, the TT/030 and Mega STe, the same coverage that you have given the Macintosh, Amiga 3000, and Next computers recently.

There are hundreds of thousands of Atari ST users world-wide waiting patiently to purchase a multi-coverage computer magazine that includes the ST/TT. Please consider including the Atari ST/TT computer lines in your magazine.

Sincerely,

\*YOUR NAME HERE\*

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Questions or comments about this letter writing campaign should be addressed to :

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or by contacting:

Brad Martin of STReport or Derek Signorini of the AUA on FNET or FIDO, or on GENIE as ST.REPORT, DC.SIGNORINI, or Compuserve as 72327,1060. You may also reach us on the AUA Online BBS at 412-746-8699, or by calling the AUA Voice Line at 412-745-8930. STReport Online Magazine's addresses on the services, its offices and phone numbers (BBS & FAX) are listed elsewhere in this issue.

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> STReport CONFIDENTIALâ €  
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"BLOCKBUSTER ATARI NEWS FIRST!"

- Sunnyvale, CA  
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A STACY FOR THE MASSES?

It appears Atari might have been listening to it's user base, and their complaints about the STacy portable. The STacy is a great MIDI controller, but as a portable it leaves a great deal to be desired. It is a little on the heavy side, and is not setup for batteries, so you must plug it in. There are optional carrying cases that have a built in battery available, but they cost around \$250 - \$300, and they add even more weight to the current STacy.

Atari has apparently rectified these problems. They should soon be introducing a new portable, laptop ST. This new computer will be based in part on the 1040STe, and have all the most features the STe computer has. It will be lighter in weight, and allow the use of batteries for an extended period of time. ST Report will bring you more news on this development as it becomes available.

- Sunnyvale, CA  
-----

BIG TIME PROGRAMMING CONTEST!

According to our ever present sources, the NEW DEMO CONTEST that's open to all persons is creating quite a stir. Atari will award a 32Mhz TT030 with hard drive to the best, hottest, slickest DEMO created by an enterprising person. Not only is this contest designed to bring out the best talents in the Atari community, it hoped that the results will blow away all the present demos by a 'country mile'. Come'on folks get the numbers a crunchin'! There are many other great prizes too.

- Sunnyvale, CA  
-----

NEW DESK RIGHT AROUND THE CORNER?

Without jumping to conclusions or assuming anything, there is the "distinct possibility" that NEWDESK will be made available (49.95?) to the Userbase shortly... the time frame is not really important. The real importance is the strong indicator that Atari is really listening to the wants and desires of the userbase. This is an extremely positive indicator and one that should not be taken lightly. Atari has by all indications so far, turned the corner and is on the right path. Imagine for moment, the userbase and Atari working together to bring forward the innovations derived from suggestions from the sources available in the userbase. Of course this would be along with those normally available to Atari. That's a development powerhouse folks. NewDesk in the disk-based form will afford the entire userbase an opportunity to see, feel and use the latest on their current machines. An excellent aid in deciding to upgrade to a Mega STe or TT030.

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